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DALY, CROWLEY & MOFFORD, LLP

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~~OCT 04 2004~~
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FACSIMILE TRANSMITTAL SHEET

including this transmittal sheet, document consists of 61 pages.

Date: September 30, 2004

Time:

Deliver To: Commissioner for Patents

From: Christopher S. Daly

Company: USPTO

Facsimile Number: 703-872-9306

Telephone Number:

MESSAGE

Re: U.S. Patent Application of Rafael Reif et al.

Entitled: MULTI-LAYER INTEGRATED SEMICONDUCTOR STRUCTURE
HAVING AN ELECTRICAL SHIELDING PORTION

Filed On: December 30, 2003

Application No.: 10/749,096

MIT Case No.: 10005

MARCO File No. P0435

DCM Case No.: MIT-136DUS

PLEASE CONFIRM RECEIPT OF THIS FACSIMILE TRANSMISSION. THANK YOU.

STATEMENT OF CONFIDENTIALITY

The documents included with this facsimile transmittal sheet contain information which is confidential and/or privileged. The information is intended to be for the use of the addressee named on this transmittal sheet. If you are not the addressee, note that any disclosure, photocopying, distribution or use of the contents of this faxed information is prohibited. If you have received this facsimile in error, please notify us by telephone (collect) immediately so that we can arrange for the retrieval of the original documents at no cost to you.

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Client Matter No.: MIT-136DUS

*- missing 3 page
Received 10/04
in ETC*

PTO/SB/21 (modified) (02-04)

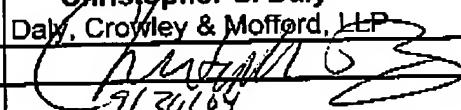
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>		Application Number 10/749,096
		Filing Date December 30, 2003
		First Named Inventor Rafael Reif
		Art Unit 3745
		Examiner Name Not Yet Assigned
Total Number of Pages in This Submission 60		Attorney Docket Number MIT-136DUS

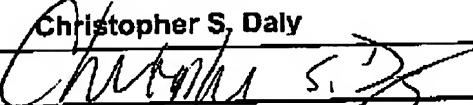
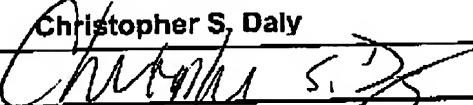
ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Postcard PTO SB/08A with Three (3) References Cited Copy of PCT International Search Report
Remarks In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name Christopher S. Daly	Reg. No. 37,303
Signature 	
Date 9/30/04	

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name Christopher S. Daly	Signature 	Date 9/30/04
Signature 		

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/749,096 Confirmation No.: 3177
Applicant : Rafael Reif et al.
Filed : December 30, 2003
T.C./A.U. : 3745
Examiner : Not Yet Assigned

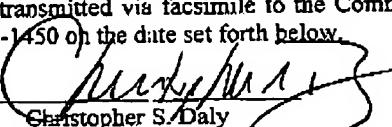
Docket No. : MIT-136DUS
Customer No. : 022494

Certificate of Mailing (37 C.F.R. 1.8(a))

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9/30/04Date of Signature
and Mail Deposit

By:


Christopher S. Daly
Reg. No. 37,303INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

It is desired to cite for the record in this application the enclosed documents listed on the attached copy of PTO form PTO/SB/08A (Formerly #1449). The paragraph(s) marked below are applicable to this Information Disclosure Statement.

[] (1) The enclosed Information Disclosure Statement is being filed: within three months of the filing date; or within three months of the entry of the national stage of the above-identified application; or before the mailing of a first Office Action on the merits; or before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. §1.114. Accordingly, Applicant(s) believes that no fee or statement is required.

Appl. No. 10/749,096

Docket No. MIT-136DUS

any individual having a duty of disclosure as set forth in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the accompanying Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(d)

INCLUDING STATEMENTS UNDER 37 C.F.R. §§ 1.704(d) AND 1.97(e)(1)

[] (8) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by statements under 37 C.F.R. §§ 1.704(d) and 1.97(e)(1) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that each item of information contained in the attached Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application mailed not more than three months prior to the filing of the accompanying Information Disclosure Statement and was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the accompanying Information Disclosure Statement.

The filing of this Information Disclosure Statement is not a representation by the undersigned as to personal knowledge of the contents of every word or phrase of the material enclosed or that reliance on other suitably trained professionals has not been made.

If a search report of a searching agency is enclosed identifying the nature of the relevance of each document, such a designation is deemed to satisfy Rule 98(a) (3) even if in a foreign language, since the few terms of relevance therein are deemed of universal cognizance. However, Applicant(s) does not necessarily adopt the position reflected by that report.

Appl. No. 10/749,096

Docket No. MIT-136DUS

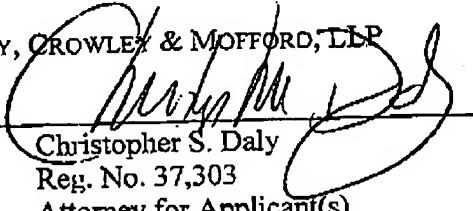
The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

Respectfully submitted,

Dated: 30 Sep 04

DALY, CROWLEY & MOFFORD, LLP

By:


Christopher S. Daly

Reg. No. 37,303

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Canton, MA 02021-2354

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Fax: (781) 401-9966

csd@dc-m.com

Q:\mit-136dus\ids\letter for pct search report dated 9-15-04.doc

PATENT COOPERATION TREATY

9.18.47

PCT

From the INTERNATIONAL SEARCHING AUTHORITY

To:
 DALY, CROWLEY & MOFFORD, LLP
 Attn. Daly, Christopher S.
 275 Turnpike Street
 Suite 101
 Canton, MA 02021
 UNITED STATES OF AMERICA

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

Date of mailing
(day/month/year) 15/09/2004

Applicant's or agent's file reference
MIT-136AWO

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/US 03/41407

International filing date
(day/month/year) 30/12/2003

Applicant

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

1. The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the International application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the International application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for International publication.

Within 18 months from the priority date, a demand for International preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority

 European Patent Office, P.B. 6618 Patentlaan 2
 NL-2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax. (+31-70) 340-3016

Authorized officer
Jacinta Reddy

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between those Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/sa filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.
It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Office, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

9-18-04

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference MIT-136AWO	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/US 03/41407	International filing date (day/month/year) 30/12/2003	(Earliest) Priority Date (day/month/year) 31/12/2002
Applicant MASSACHUSETTS INSTITUTE OF TECHNOLOGY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.
 It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :
 - contained in the international application in written form.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority in written form.
 - furnished subsequently to this Authority in computer readable form.
 - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. Certain claims were found unsearchable (See Box I).

3. Unity of invention is lacking (see Box II).

4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this International search report, submit comments to this Authority.

1 _____

 None of the figures.

6. The figure of the drawings to be published with the abstract is Figure No.

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

INT'L NATIONAL SEARCH REPORT

International Application No.
PCT/US 03/41407

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L23/552 H01L25/065 H01L21/98 H01L23/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 151 962 A (ST MICROELECTRONICS SRL) 7 November 2001 (2001-11-07) paragraphs '0001! - '0004! paragraphs '0007! - '0009!; figures 1,2 paragraphs '0010! - '0012!; figure 3 paragraphs '0013! - '0017!; figures 4-8 paragraphs '0043! - '0045!	1-41
X	US 2002/135062 A1 (MASTROMATTEO UBALDO ET AL) 26 September 2002 (2002-09-26) paragraphs '0002! - '0006! paragraphs '0025! - '0027!; figure 3 paragraphs '0028! - '0038!; figures 4-8	1-41 -/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier document but published on or after the international filing date
- "C" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "D" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the International search report

7 September 2004

15/09/2004

Name and mailing address of the ISA
European Patent Office, P.O. 5018 Patenttaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl
Fax: (+31-70) 340-3016

Authorized officer

Corchia, A

INTERNATIONAL SEARCH REPORT

National Application No
PCT/US 03/41407

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category *	Citation of document, with indication, where appropriate, of the relevant passages	
X	Y. HAYASHI ET AL.: "Fabrication of Three-dimensional IC Using "Cumulatively Bonded IC" (CUBIC) Technology" SYMPOSIUM ON VLSI TECHNOLOGY, 4 June 1990 (1990-06-04), - 7 June 1990 (1990-06-07) pages 95-96, XP002282633 paragraphs '0001!, '0002!; figures 1a-1e paragraph '0006!	1-40
X	US 5 706 578 A (HUEBNER HOLGER) 13 January 1998 (1998-01-13) column 1, lines 1-25 column 2, lines 53-61 column 4, lines 15-21, 46-55 column 5, line 56 - column 7, line 40; figure 1 column 10, lines 51-59	1-39
X	US 2002/109236 A1 (CHUNG MYUNG-KEE ET AL) 15 August 2002 (2002-08-15) paragraphs '0006! - '0008!, '0015! - '0020! paragraphs '0027! - '0029!; figure 1 paragraphs '0030! - '0037!; figure 2 paragraph '0052! paragraphs '0053! - '0056!; figure 4	1-39

INTL INTERNATIONAL SEARCH REPORT

Information on patent family members

Optional Application No
PCT/US 03/41407

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
EP 1151962	A 07-11-2001	EP 1151962 A1 JP 2002076269 A US 2002135062 A1 US 2001038148 A1		07-11-2001 15-03-2002 26-09-2002 08-11-2001
US 2002135062	A1 26-09-2002	EP 1151962 A1 JP 2002076269 A US 2001038148 A1		07-11-2001 15-03-2002 08-11-2001
US 5706578	A 13-01-1998	DE 4427516 A1 WO 9522840 A1 DE 59508684 D1 EP 0745274 A1 JP 9509011 T		15-02-1996 24-08-1995 05-10-2000 04-12-1996 09-09-1997
US 2002109236	A1 15-08-2002	KR 2002066095 A JP 2002305283 A		14-08-2002 18-10-2002